MIFluFocus
August 31, 2006
Weekly Influenza Surveillance and Avian Influenza Update

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New updates in this issue (see each section for more information):

- OTC product surveillance has noted increases in cough and cold medications and chest rubs.
- Sentinel Surveillance still indicating very low levels of ILI.
- New WHO international seasonal influenza update.
- Avian influenza: No new human cases this week; possible human cluster in Indonesia ruled out; Michigan swans confirmed to have only the North American strain of low-pathogenic H5N1.

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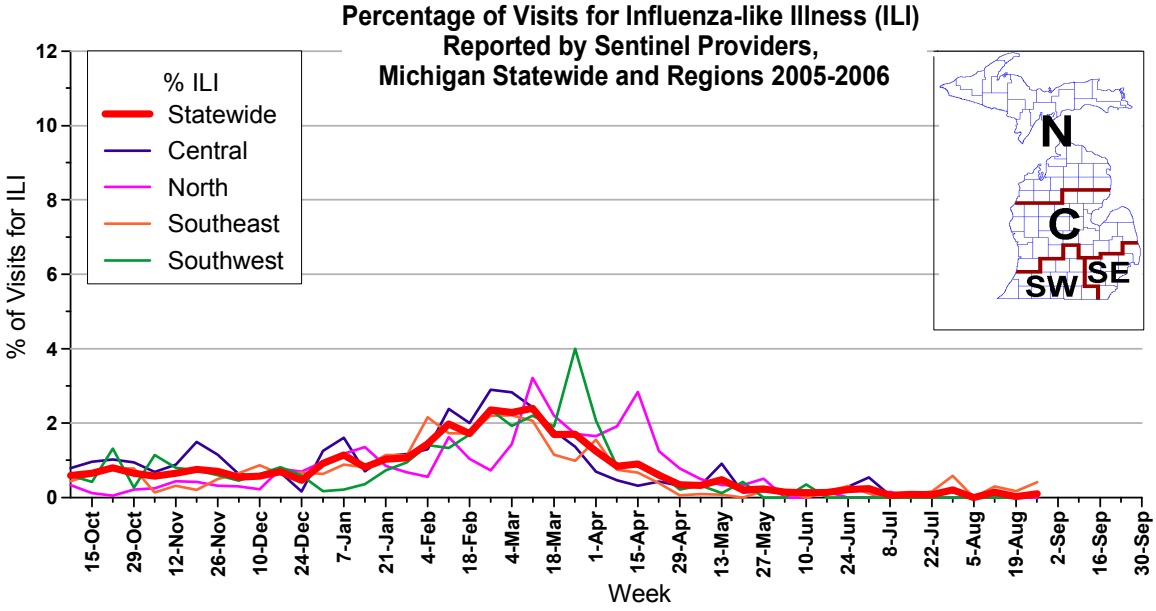
Michigan Disease Surveillance System: No recent aberrations have been detected in flu-like illness activity. It continues to remain very low and is comparable to last year at this time.

Emergency Department Surveillance: No recent aberrations have been detected in the level of either respiratory or constitutional emergency department visits. Both indicators remain low and are comparable to last year at this time.

Over-the-Counter Product Surveillance: A general increasing trend has been seen in sales of both cough and cold medications and chest rubs. Antifever medication sales decreased from the previous week. Thermometer sales have stabilized but are at an increased level compared to this time last year. These indicators will continue to be monitored. No recent aberrations have been detected in the level of the remaining indicators, all of which remain very low and are comparable to last year at this time.

Sentinel Surveillance (**as of August 31, 2006**): During the week ending August 26, 2006, the proportion of visits due to influenza-like illness (ILI) remained roughly unchanged from last week at 0.1% of all visits. Low levels of ILI activity were reported in all regions; the percentage of visits due to ILI by region was 0.0%, Central; 0.0%, North; 0.4%, Southeast; and 0.2%, Southwest.



As part of pandemic influenza preparedness, CDC and MDCH highly encourage and recommend year-round participation from all sentinel providers. Data that we obtain over the summer will help us to establish a baseline level of activity during months that are not typically associated with high levels of influenza activity. New practices are encouraged to join influenza sentinel surveillance program today! Contact Rachel Potter at 517-335-9710 or potterr1@michigan.gov for more information.

Laboratory Surveillance (as of August 31): No reports were received for the past week. The MDCH laboratory has confirmed 138 influenza cases in Michigan over the 2005-2006 season, of which 132 were influenza A (H3N2) and 6 were influenza B.

As a reminder, the positive predictive value of influenza rapid tests decreases during times of low influenza prevalence, such as the summer months. MDCH suggests that during periods of low influenza activity in your community, all positive rapid tests results be confirmed by sending in a specimen for viral culture; this can be arranged through your local health department.

Influenza-Associated Pediatric Mortality (as of August 31): There were no new reports this week. For the 2005-2006 influenza season, Michigan had one confirmed influenza-associated pediatric death from region 2S. During October 2, 2005 – May 20, 2006, CDC received reports of 35 influenza-associated pediatric deaths, 33 of which occurred during the current influenza season.

***Reminder: The CDC has asked all states to continue to collect information on any pediatric death associated with influenza infection. This includes not only any death in a child less than 18 years of age resulting from a clinically compatible illness confirmed to be influenza by an appropriate laboratory or rapid diagnostic test, but also unexplained death with evidence of an infectious process in a child. Refer to http://www.michigan.gov/documents/fluletter_107562_7.pdf for the complete protocol. It is important to immediately call or fax information to MDCH to ensure that appropriate clinical specimens can be obtained.

Congregate Settings Outbreaks (as of August 31): No reports were received during the past reporting week. A total of two congregate setting outbreaks have been reported to MDCH this season; one in Southwest Michigan in late February and one in Southeast Michigan in late March. Both outbreaks were MDCH laboratory confirmed as due to influenza A (H3N2).

National (CDC, August 28): On August 21, CDC posted an array of patient and provider education materials to its influenza web section. The following are now available for downloading: patient education materials for the 2006-07 flu season, provider education materials for the 2006-07 flu season, patient screening form for trivalent inactivated influenza vaccine (TIV), Stop the Spread of Germs posters and flyers in several languages, fact sheets in several languages, and influenza vaccine VISs. To access the materials, go to http://www.cdc.gov/flu/professionals/patiented.htm.

International (WHO, as of August 30): During weeks 31- 33, with the exception of New Zealand, where regional influenza A(H3N2) activity continued, overall influenza activity in both northern and southern hemispheres was low. In Australia, localized influenza activity continued to be reported during weeks 31–33. Influenza A and B viruses co-circulated. During weeks 31-33, influenza A activity in New Zealand remained similar to previous weeks and was reported as regional. Low influenza activity was reported in Argentina (H1, A and B), Hong Kong, Special Administrative Region of China (H1, H3 and B), Japan (H1), Madagascar, South Africa (H3 and B), and Uruguay (H1, A and B). Sweden reported an A(H3N2) case imported from China during week 33. Mexico, Portugal and Slovenia reported no influenza activity.

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Weekly influenza activity reporting to the CDC is finished for the 2005-2006 influenza season.

End of Seasonal Report

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Avian Influenza Activity

WHO Pandemic Phase: Phase 3 - Human infection(s) with a new subtype, but no human-to-human spread or rare instances of spread to a close contact.

International Update (ProMed, August 24): According to health officials in Indonesia, no evidence has been found of human-to-human transmission of H5N1 bird flu in the remote villages of West Java which have witnessed the latest outbreak of the deadly virus. This has been confirmed by the WHO. Two people have died and a third is still ill from a village in Cikelet in Garut district. The Health Ministry's Communicable Disease Control Center Director says investigations have also shown there was no

"cluster" of cases in the villages. To date there have been 18 suspected bird flu cases in Cikelet, and 5 other suspected cases died before swabs were taken to determine the cause of death. The disease appears to have been brought into Cikelet 3 months earlier with live chickens purchased from an outside market. Chickens began dying shortly afterwards, with the outbreak spreading through the villages in the area. A total of 3500 poultry had been culled in 5 areas within a one-km radius of Garut and tests have confirmed that half of the poultry were infected by H5N1.

It seems many people hide their poultry when government officials come to their houses, despite officials explaining to village and community leaders the importance of the cull. People are now being offered some compensation for every bird culled, and in future the police will accompany inspectors on their rounds. The Cikelet region of Indonesia's West Java province is remote and inaccessible. The population has had no experience with the disease, and high-risk behaviors occurred during the disposal of carcasses or the preparation of sick or dead birds for consumption, says the WHO. In order to contain the virus, Indonesian authorities are testing all those who were in contact with the bird flu victims, and so far all tests have been returned negative. The 2400 people in the area have been provided with Tamiflu, and 2500 chickens have been culled.

WHO (August 29): The WHO has developed specific case definitions for suspect, probable, and confirmed avian influenza H5N1 cases, which are currently only applicable during the current WHO Pandemic Phase 3. These definitions are subject to change if new epidemiological information becomes available, and can be viewed at http://www.who.int/csr/disease/avian_influenza/guidelines/case_definition2006_08_29/en/index.html.

National Wild Bird Surveillance (USDA, August 29): USDA, the U.S. Department of the Interior (DOI), and the State of Alaska have tested more than 13,000 wild migratory birds for highly pathogenic avian influenza (HPAI) H5N1 in Alaska. No HPAI H5N1-a virus that has killed wild birds, commercial poultry and more than 140 people in Asia, Europe and Africa-has been detected in any of the Alaska samples. Sampling wild birds in Alaska has been taking place since April 2006. The sampling program includes a goal to sample and test 75,000 to 100,000 migratory birds across the United States this year. So far DOI has tested more than 11,000 samples and USDA has tested more than 2,000 samples-for a total of more than 13,000. Of those tested by DOI, approximately 113 have tested positive for some form of avian influenza. This is to be expected since there are 144 subtypes of "bird flu," most of which pose no threat to domestic poultry or humans and do not produce noticeable symptoms in wild birds. Of the 113 samples, all tested negative for the highly pathogenic H5N1 virus. The Alaska samples were taken from 26 "target species." Because of their migratory patterns and habitats, these species were determined to be most likely to have encountered highly pathogenic H5N1 before arriving in Alaska. Sample numbers are now being entered into a database called the HPAI Early Detection Data System, which is available at http://wildlifedisease.nbii.gov/ai/ to those involved in avian influenza monitoring and response to share information on sample collection sites, bird species sampled, and test results.

Michigan Wild Bird Surveillance (USDA, August 28): The U.S. Department of Agriculture today announced final test results, which confirm that an H5N1 avian influenza virus detected in samples collected earlier this month from two Michigan wild mute swans is a low pathogenic subtype. This strain has been detected several times in wild birds in North America and poses no threat to human health. The USDA National Veterinary Services Laboratories (NVSL) confirmed the presence of the "North American strain" of low pathogenic H5N1 avian influenza in one of twenty samples collected from the two wild mute swans. Preliminary test results announced on August 14 indicated that an H5N1 strain could be present in two of the collected samples. Only one of the samples contained high enough levels of the virus to conduct confirmatory testing. As previously announced, genetic testing ruled out the possibility that either of the samples carried the highly pathogenic strain of H5N1 avian influenza that is circulating overseas. Low pathogenic strains of avian influenza commonly occur in wild birds and typically cause only minor sickness or no noticeable signs of disease in birds. Low pathogenic H5N1 is very different from the more severe highly pathogenic H5N1 circulating in parts of Asia, Europe and Africa. Highly pathogenic strains of avian influenza spread rapidly and are often fatal to chickens and turkeys.

To learn about avian influenza surveillance in Michigan wild birds or to report dead waterfowl, go to Michigan's Emerging Disease website at http://www.michigan.gov/emergingdiseases.

Table 1. H5N1 Influenza in Poultry (Outbreaks up to August 29, 2006)
(Source: http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 9/1/2006)

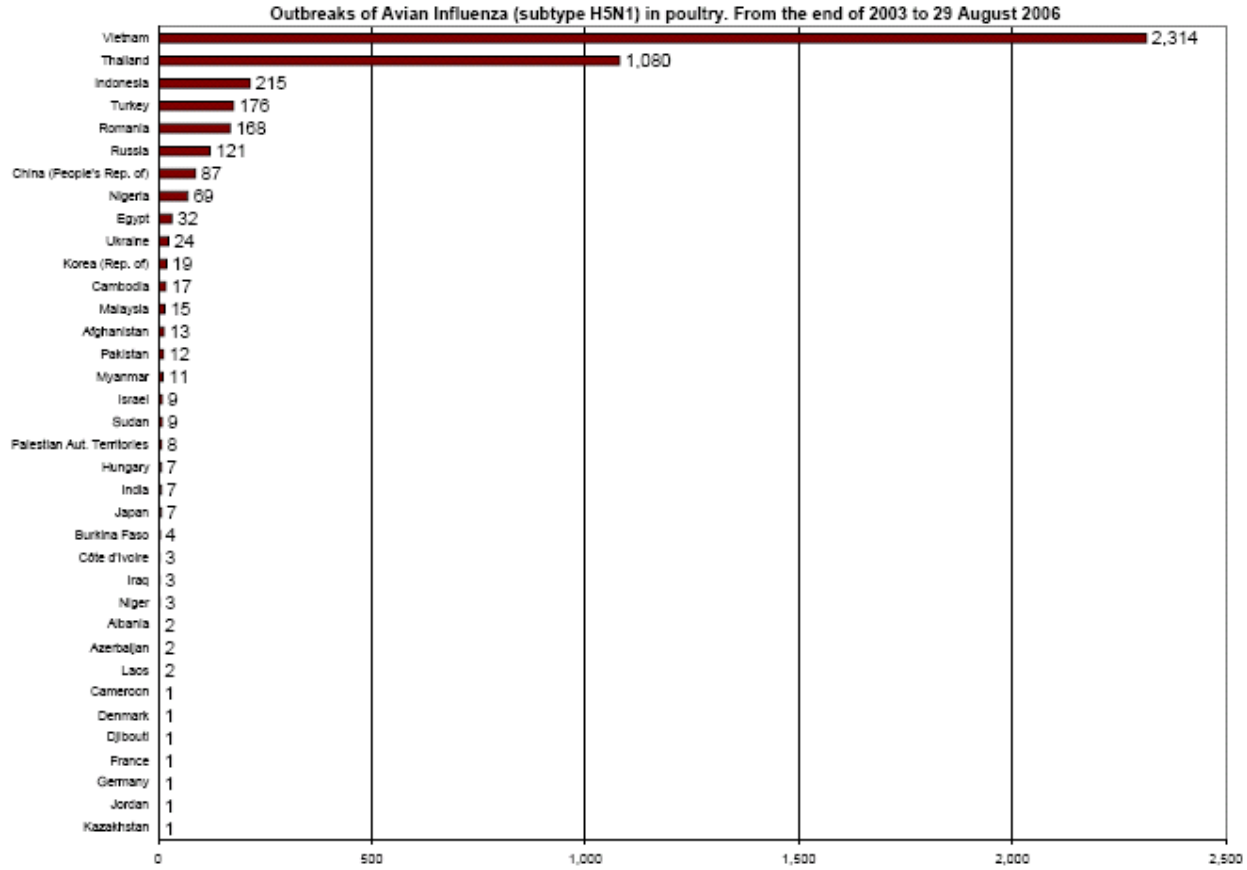

Table 2. H5N1 Influenza in Humans (Cases up to August 23, 2006)
(http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2006_06_06/en/index.html Downloaded 8/23/2006)
Cumulative number of confirmed human cases of Avian Influenza A(H5N1) reported to WHO. The total number of cases includes number of deaths. WHO only reports laboratory-confirmed cases.

Country	2003		2004		2005		2006		Total	
	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths
Azerbaijan	0	0	0	0	0	0	8	5	8	5
Cambodia	0	0	0	0	4	4	2	2	6	6
China	1	1	0	0	8	5	12	8	21	14
Djibouti	0	0	0	0	0	0	1	0	1	0
Egypt	0	0	0	0	0	0	14	6	14	6
Indonesia	0	0	0	0	17	11	43	35	60	46
Iraq	0	0	0	0	0	0	2	2	2	2
Thailand	0	0	17	12	5	2	2	2	24	16
Turkey	0	0	0	0	0	0	12	4	12	4
Viet Nam	3	3	29	20	61	19	0	0	93	42
Total	4	4	46	32	95	41	96	64	241	141